

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A tensioner for a power transmission belt that operates on an endless path and that utilizes asymmetric motion control, the tensioner comprising:

an arm comprising a belt engaging section and a drum section;

a support member for securing the tensioner relative to the belt, the arm pivoting on the support member;

a spring that urges the arm to pivot about the support member in a first direction and urges the belt engaging section against the belt with a force to tension the belt;

a fluid containing chamber located inside a portion of the drum section of the arm; and

a valve pivotally attached to the tensioner so that the valve extends across the fluid containing chamber.

Claim 2 (original): The tensioner of claim 1, further comprising sealing devices.

Claim 3 (original): The tensioner of claim 1, wherein the valve is biased by a weighted device.

Claim 4 (original): The tensioner of claim 1, wherein the valve is biased by a spring device.

Claim 5 (original): The tensioner of claim 1, wherein a fluid in the fluid filled chamber is a hydraulic fluid with a predetermined viscosity, such that the tensioner can be tuned and an desired viscous damping coefficient can be established.

Claim 6 (currently amended): ~~The tensioner of claim 1,~~ A tensioner for a power transmission belt that operates on an endless path and that utilizes asymmetric motion control, the tensioner comprising:

an arm comprising a belt engaging section and a drum section;

a support member for securing the tensioner relative to the belt, the arm pivoting on the support member;

a spring that urges the arm to pivot about the support member in a first direction and urges the belt engaging section against the belt with a force to tension the belt;

a fluid containing chamber located inside a portion of the drum section of the arm; and

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a valve pivotally attached to the tensioner so that the valve extends across the fluid containing chamber;

wherein the valve is coupled to the drum section and ~~the chamber~~ moves with respect to the ~~valve~~chamber, wherein when the valve moves in a first direction the valve opens and when the valve moves in a second direction the valve closes and locks against a portion of the tensioner such that a damping force is generated based on the fluid in the chamber pushing against the closed and locked valve.

Claim 7 (original): The tensioner of claim 1, further comprising:

a stationary valve plate coupled to a first portion of the drum section, wherein the valve is coupled to the stationary valve plate;

wherein the chamber is coupled to a second portion of the drum section;

wherein the chamber moves with respect to the valve, wherein when the chamber moves in a first direction the valve opens and when the chamber moves in a second direction the valve closes and locks against a portion of the tensioner such that a damping force is generated based on the fluid in the chamber pushing against the closed and locked valve.

Claim 8 (original): The tensioner of claim 1, wherein the valve and the chamber move relative to each other and wherein the valve remains open in a first direction of motion and closes and locks against a portion of the tensioner in a second direction of motion to lock, such that a damping force is generated through the locking.

Claim 9 (original): The tensioner of claim 1, wherein the support member comprises a hub about which the arm pivots.

Claim 10 (original): The tensioner of claim 1, wherein the belt engaging section includes a pulley.

Claim 11 (original): The tensioner of claim 1, wherein the support member comprises a housing for the spring.

Claim 12 (original): The tensioner of claim 11, wherein after the valve locks against the portion of the tensioner a predetermined amount of a fluid in the chamber leaks adjacent the valve.

Claim 13 (canceled)

Claim 14 (original): A method of utilizing a tensioner for maintaining a predetermined tension on a power transmission belt to be operated on an endless path, the method comprising the steps of:

providing an arm comprising a belt engaging section and a drum section;

providing a support member configured to be secured relative to the belt, the support member comprising a hub having a longitudinal axis and being fixed from movement relative to the belt engaging section, the hub moveably holding the arm;

providing a spring operatively interconnected to the arm and the support member, the spring being configured to urge the belt engaging section relative to the support member and against the belt with a force to provide the predetermined tension on the belt;

providing a fluid containing chamber located inside a portion of the drum section of the arm; and

providing a valve pivotally attached to the tensioner so that the valve extends across the fluid containing chamber.

Claim 15 (original): The method of claim 14, further comprising the step of providing sealing devices.

Claim 16 (previously amended): The method of claim 14, further comprising the step of moving the chamber relative to the valve wherein with movement in a first direction the valve remains open and with movement in a second direction the valve closes and locks against a portion of the tensioner, such that a damping force is generated.

Claim 17 (original): The method of claim 14, wherein the valve is coupled to the drum section and the chamber moves with respect to the valve, wherein when the chamber moves in a first direction the valve opens and when the chamber moves in a second direction the valve closes and locks against a portion of the tensioner such that a damping force is generated based on the fluid in the chamber pushing against the closed and locked valve.

Claim 18 (original): The method of claim 14, further comprising the step of:

providing a stationary valve plate coupled to a first portion of the drum section, wherein the valve is coupled to the stationary valve plate;

wherein the chamber is coupled to a second portion of the drum section;

wherein the chamber moves with respect to the valve, wherein when the chamber moves in a first direction the valve opens and when the chamber moves in a second direction the valve closes and locks against a portion of the tensioner such that a damping force is generated based on the fluid in the chamber pushing against the closed and locked valve.

Claim 19 (canceled)

Claim 20 (canceled)

Claim 21 (currently amended): ~~The tensioner of claim 1~~ A tensioner for a power transmission belt that operates on an endless path and that utilizes asymmetric motion control, the tensioner comprising:

an arm comprising a belt engaging section and a drum section;
a support member for securing the tensioner relative to the belt, the arm pivoting on the support member;
a spring that urges the arm to pivot about the support member in a first direction and urges the belt engaging section against the belt with a force to tension the belt;
a fluid containing chamber located inside a portion of the drum section of the arm; and
a valve pivotally attached to the tensioner so that the valve extends across the fluid containing chamber;

~~wherein the chamber is formed in a portion of the drum section which remains stationary when the arm pivots and the valve is mounted on a portion of the drum section which moves when the arm pivots such that the valve moves with respect to the chamber.~~

Claim 22 (currently amended): The tensioner of claim 1 wherein the valve is operably mounted ~~on a portion of the drum section~~ the support member, which remains stationary when the arm pivots, and the chamber is formed in a portion of the drum section which moves as the arm pivots such ~~that~~ that the chamber moves with respect to the valve.

Claim 23 (previously added): The tensioner of claim 21 wherein the drum section includes an annular member in which the chamber is formed.

Claim 24 (previously added): The tensioner of claim 23 wherein the annular member remains stationary when the arm pivots.

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Claim 25 (currently amended): The tensioner of claim ~~23~~22 wherein the drum section includes an annular member in which the chamber is formed and wherein the annular member moves with the arm as the arm pivots.